FORM PTO-1390 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE (MODIFIED)

ATTORNEY'S DOCKET NUMBER: X-12785

U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5): 09/980962

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/US00/15037	06/15/2000 (06.15.00)	06/29/1999 (06.15.99)

TITLE OF INVENTION: PROTAMINE FREE INSOLUBLE ACYLATED INSULIN COMPOSITIONS

APPLICANT(S) FOR DO/EO/US: Mark Laurence Brader

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. [ ] This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. [ ] This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. [X] A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. [ ] is transmitted herewith (required only if not transmitted by the International Bureau).
   b. [ ] has been transmitted by the International Bureau.
   c. [X] is not required, as the application was filed in the United States Receiving Office (RO/US).
6. [ ] A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. [X] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
   a. [ ] are transmitted herewith (required only if not transmitted by the International Bureau).
   b. [ ] have been transmitted by the International Bureau.
   c. [ ] have not been made; however, the time limit for making such amendments has NOT expired.
   d. [X] have not been made and will not be made.
8. [ ] A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. [X] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. [X] A copy of the International Preliminary Examination Report (IPER), including any annexes, and, if not in English, an English language translation of the annexes to the IPER under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern document(s) or information included:

11. [ ] An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. [X] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

13. [X] A FIRST preliminary amendment.
    [ ] A SECOND or SUBSEQUENT preliminary amendment.
14. [ ] A substitute specification.
15. [ ] A change of power of attorney and/or address letter.
16. [ ] Other items or information:

U.S. APPLICATION NO. (if known, see 37 C.F R. 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
09/980962	PCT/US00/15037	X-12785

17. [X] The following fees are submitted:

	CALCULATIONS PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. **$1040.00**		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO **$890.00**		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO..... **$750.00**		
International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) **$710.00**		
International preliminary examination fee paid to USPTO (37 CRF 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) **$100.00**		
ENTER APPROPRIATE BASIC FEE AMOUNT =	$ 890.00	
Surcharge of **$130.00** for furnishing the oath or declaration later than __20 __30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	30 - 20=	10	**X $18.00**	$ 180.00	
Independent claims	2 - 3=	0	**X $84.00**	$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			**+ $280.00**	$ 280.00	
TOTAL OF ABOVE CALCULATIONS =				$ 1350.00	
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).				$	
SUBTOTAL =				$ 1350.00	
Processing fee of **$130.00** for furnishing English translation later than __ 20 __30 months from the earliest claimed priority date (37 CFR 1.492(f)). +				$	
TOTAL NATIONAL FEE =				$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +				$	
TOTAL FEES ENCLOSED =				$ 1350.00	
				Amount to be refunded	$
				charged	$

a. [ ] A check in the amount of $_____ to cover the above fees is enclosed.

b. [X] Please charge my Deposit Account No. 05-0840 in the amount of $ 1350.00 to cover the above fees. A duplicate copy of this sheet is enclosed.

c. [X] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 05-0840. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:
ELI LILLY AND COMPANY
PATENT DIVISION/GER
LILLY CORPORATE CENTER

Grant E. Reed
SIGNATURE

Grant E. Reed
NAME

11/14/01
Date

41,264
REGISTRATION NUMBER

(317) 276-1664
TELEPHONE NUMBER

IN THE UNITED STATES RECEIVING OFFICE (USRO)

Applicant(s): Mark Laurence Brader
International Application No.: PCT/US00/15037
Filed: 06/15/2000 (06.15.00)
Invention: PROTAMINE FREE INSOLUBLE ACYLATED INSULIN COMPOSITIONS
Lilly Reference: X-12785
Earliest Priority Date: 06/29/1999 (06.29.99)

Certificate Under 37 C.F.R. § 1.10

Attention: DO/EO
Box PCT
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir/Madam:

"Express Mail" mailing label number: EL559725799US
Date of Deposit: November 15, 2001

I hereby certify that the following attached paper or fee Transmittal Letter to the United States Designated/Elected Office (US) concerning a filing under 35 U.S.C. 371 of the International Application identified above is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Olga M Franz
(Typed or printed name of person mailing paper)

Olga M Franz
(Signature of person mailing paper or fee)

"Express Mail" mailing label number EL559725799US

Date of Deposit November 15, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Olga M Franz
Printed Name

Olga M Franz
Signature

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mark Laurence Brader)
)
For: PROTAMINE-FREE INSOLUBLE)
ACYLATED INSULIN COMPOSITIONS)
)
Docket No. X-12785)
)
U.S. Natl. Phase of)
International Appl. No. PCT/US00/15037)

International Filing Date: June 15, 2000

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

Prior to calculation of the claim fee, kindly amend the claims as follows.

Cancel claim 8 without prejudice to or disclaimer of the subject matter therein.

Please replace pending claims 1-3, 5-7, 9-11 and 13-20 with the following respective claims.

1. Ultralente-like crystals, comprising:

a) a derivatized human insulin or derivatized human insulin analog formed by derivatizing human insulin or a human insulin analog with a saturated, straight-chain fatty acid having from 4 to 16 carbon atoms such that the fatty acid forms an amide bond with the ε-amino group of the B29-lysine of human insulin or a human insulin analog; and

b) a divalent metal cation.

2. The crystals of Claim 1, wherein the derivatized human insulin is selected from the group consisting of B29-butanoyl-human insulin, B29-pentanoyl-human insulin, and B29-hexanoyl-human insulin.

3. An insoluble composition, comprising the crystals of Claim 1.

5. Ultralente-like crystals, comprising:

a) a protein selected from the group consisting of insulin and insulin analogs;

b) a derivatized human insulin or derivatized human insulin analog formed by derivatizing human insulin or a human insulin analog with a saturated, straight-chain fatty acid having from 4 to 16 carbon atoms such that the fatty acid forms an amide bond with the ε-amino group of the B29-lysine of human insulin or a human insulin analog; and

c) a divalent metal cation.

6. The crystals of Claim 5 , wherein the protein is human insulin.

7. The crystals of Claim 1, wherein the protein is a monomeric insulin analog.

9. The crystals of Claim 1, wherein the molar proportion of derivatized human insulin or derivatized human insulin analog is from 15% to 90% of the total protein.

10. The crystals of Claim 1, wherein the divalent metal cation is zinc, which is present at about 0.3 mole per mole of total protein to about 2 moles per mole of total protein.

11. An insoluble composition, comprising the crystals of Claim 5.

13. A pharmaceutical composition, comprising an insoluble phase and a solution phase, wherein the insoluble phase comprises the insoluble composition of Claim 3 or 11, and wherein the soluble phase comprises an aqueous solvent.

14. The pharmaceutical composition of Claim 13 wherein the solution phase further comprises a preservative at a concentration of about 0.5 mg per mL to about 6 mg per mL of solution, a pharmaceutically acceptable buffer, and an isotonicity agent.

15. A method of treating diabetes comprising administering the crystals of Claim 1 or 5 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

16. A method of treating diabetes comprising administering the insoluble composition of Claim 3 or 11 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

17. A method of treating hyperglycemia comprising administering the crystals of Claim 1 or 5 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

18. A method of treating hyperglycemia comprising administering the insoluble composition of Claim 3 or 11 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

19. A process for preparing the crystals of Claim 1, comprising:

a) preparing a crystallization solution comprising the derivatized human insulin or derivatized human insulin analog, a buffer, a salt, and a divalent cation; and

b) allowing time for crystallization to occur.

20. A process for preparing the crystals of Claim 5, comprising:

a) preparing a crystallization solution comprising (i) a protein, (ii) a derivatized human insulin or derivatized human insulin analog, (iii) a buffer, (iv) a salt, and (v) a divalent cation;

b) combining the crystallization solution of a) with a nucleating seed suspension; and

c) allowing time for crystallization to occur.

Add new claims 21-28.

--21. The crystals of Claim 1, wherein the fatty acid is myristoyl fatty acid.

22. The crystals of Claim 1, wherein the fatty acid is n-octanoic fatty acid.

23. The crystals of claim 1, wherein the human insulin analog is des(ThrB30)-human insulin.

24. The crystals of Claim 5, wherein the fatty acid is myristoyl fatty acid.

25. The crystals of claim 5, wherein the fatty acid is n-octanoic fatty acid.

26. The crystals of claim 5, wherein the human insulin analog is des(ThrB30)-human insulin.

27. The crystals of Claim 5, wherein the molar proportion of derivatized human insulin or derivatized human insulin analog is from 15% to 90% of the total protein.

28. The crystals of Claim 5, wherein the divalent metal cation is zinc, which is present at about 0.3 mole per mole of total protein to about 2 moles per mole of total protein.--

Remarks

I. Status Of The Claims

Claims 1-7 and 9-28 are active in this application.

II. Support For The Amendment

Support for the amendment of claims 1 and 5 is found in the specification, for example, at page 8, second full paragraph, and at page 12, first full paragraph.

Support for the amendment of claims 19 and 20 is found in the specification, for example, at page 8, second full paragraph, and at page 32, second full paragraph.

Claims 3, 9-11, 13, 15-18 and 20 have been amended to correct improper multiple dependencies.

Support for new claims 21 and 24 is found in the specification at page 23, line 15.

Support for new claims 22 and 25 is found in the specification at page 23, line 6.

Support for new claims 23 and 26 is found in the specification at page 16, line 2, and page 22, line 13.

Support for new claim 27 is found in claim 9 as filed originally.

Support for new claim 28 is found in the specification at page 32, line 25, and in claim 10 as filed originally.

No new matter has been added by this amendment.

III. Unity Of Invention Practice, Not Restriction Practice, Applies To The Present Application

Applicants respectfully point out that the present application is the U.S. national phase of international application no. PCT/US00/15037. U.S. restriction practice under MPEP section 803 is not applicable to the U.S. national phase of an international application. *See* MPEP section 1893.03(d). Instead, unity of invention practice applies to an international application. *Id.*

Applicants respectfully request that the U.S. Examiner apply unity of invention practice, not restriction practice, to the claims of the present application. It is believed that unity of invention exists between the claims of the present application.

If the Examiner believes that personal communication would expedite the prosecution of the present application, the Examiner is encouraged to contact the undersigned at the number provided below.

Respectfully submitted,

Grant E. Reed

Attorney for Applicant
Registration No. 41,264
Phone: 317-276-1664

Eli Lilly and Company
Patent Division/GER
Lilly Corporate Center
Indianapolis, Indiana 46285

11/14/2001

Version Of Amended Claims With Markings To Show Changes Made

1. (Once amended) Ultralente-like crystals, comprising:

a) a derivatized [protein selected from the group consisting of the] human insulin or derivatized human insulin analog [derivatives] formed by derivatizing human insulin or a human insulin analog with a [the] saturated, straight-chain fatty acid [acids] having from 4 to 16 carbon atoms such that the fatty acid forms an amide bond [acids form amide bonds] with the ε-amino group of the B29-lysine of human insulin or a human insulin analog; and

b) a divalent metal cation.

2. (Once Amended) The crystals of Claim 1, wherein the derivatized human insulin [derivative] is selected from the group consisting of B29-butanoyl-human insulin, B29-pentanoyl-human insulin, and B29-hexanoyl-human insulin.

3. (Once Amended) An insoluble composition, comprising the crystals of Claim 1 [any one of Claims 1-2].

5. (Once Amended) Ultralente-like crystals, comprising:

a) a protein selected from the group consisting of insulin and insulin analogs;

b) a derivatized [protein selected from the group consisting of the] human insulin or derivatized human insulin analog [derivatives] formed by derivatizing human insulin or a human insulin analog with a [the] saturated, straight-chain fatty acid [acids] having from 4 to 16 carbon atoms such that the fatty acid forms an amide bond [acids form amide bonds] with the ε-amino group of the B29-lysine of human insulin or a human insulin analog; and

c) a divalent metal cation.

6. (Once Amended) The crystals of Claim 5 [3], wherein the protein is human insulin.

7. (Once Amended) The crystals of Claim 1 [3], wherein the protein is a monomeric insulin analog.

9. (Once Amended) The crystals of Claim 1 [any one of Claims 3-6], wherein the molar proportion of derivatized human insulin or derivatized human insulin analog [derivatized protein] is from 15% to 90% of the total protein.

10. (Once Amended) The crystals of Claim 1 [any one of Claims 1-9], wherein the divalent metal cation is zinc, which is present at about 0.3 mole per mole of total protein to about 2 moles per mole of total protein.

11. (Once Amended) An insoluble composition, comprising the crystals of Claim 5 [any one of Claims 3-8].

13. (Once Amended) A pharmaceutical composition, comprising an insoluble phase and a solution phase, wherein the insoluble phase comprises [is comprised of] the insoluble composition of Claim 3 or 11, [Claim 3, Claim 4, Claim 11, or Claim 12,] and wherein the soluble phase comprises [is comprised of] an aqueous solvent.

14. (Once Amended) The pharmaceutical composition of Claim 13 wherein the solution phase [is] further comprises [comprised of] a preservative at a concentration of about 0.5 mg per mL to about 6 mg per mL of solution, a pharmaceutically acceptable buffer, and an isotonicity agent.

15. (Once Amended) A method of treating diabetes comprising administering the crystals of Claim 1 or 5 [any one of Claims 1-2 or Claims 5-10] to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

16. (Once Amended) A method of treating diabetes comprising administering the insoluble composition [compositions] of Claim 3 or 11 [Claim 13 or Claim 14] to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

17. (Once Amended) A method of treating hyperglycemia comprising administering the crystals of Claim 1 or 5 [any one of Claims 1-2 or Claims 5-10] to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

18. (Once Amended) A method of treating hyperglycemia comprising administering the insoluble composition [compositions] of Claim 3 or 11 [any one of Claim 13 or Claim 14] to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

19. (Once Amended) A process for preparing the crystals of Claim 1 [or Claim 2], comprising:

a) preparing a crystallization solution comprising the derivatized human insulin or derivatized human insulin analog [protein], a buffer, a salt, and a divalent cation; and

b) allowing time for crystallization to occur.

20. (Once Amended) A process for preparing the crystals of Claim 5 [any one of Claims 5-10], comprising:

a) preparing a crystallization solution comprising (i) a protein, (ii) a derivatized human insulin or derivatized human

insulin analog [protein], (iii) a buffer, (iv) a salt, and (v) a divalent cation;

b) combining the crystallization solution of a) with a nucleating seed suspension; and

c) allowing time for crystallization to occur.

21. (New) The crystals of Claim 1, wherein the fatty acid is myristoyl fatty acid.

22. (New) The crystals of Claim 1, wherein the fatty acid is n-octanoic fatty acid.

23. (New) The crystals of claim 1, wherein the human insulin analog is des(ThrB30)-human insulin.

24. (New) The crystals of Claim 5, wherein the fatty acid is myristoyl fatty acid.

25. (New) The crystals of claim 5, wherein the fatty acid is n-octanoic fatty acid.

26. (New) The crystals of claim 5, wherein the human insulin analog is des(ThrB30)-human insulin.

27. (New) The crystals of Claim 5, wherein the molar proportion of derivatized human insulin or derivatized human insulin analog is from 15% to 90% of the total protein.

28. (New) The crystals of Claim 5, wherein the divalent metal cation is zinc, which is present at about 0.3 mole per mole of total protein to about 2 moles per mole of total protein.

Claims As Of 11/14/2001

1. Ultralente-like crystals, comprising:

a) a derivatized human insulin or derivatized human insulin analog formed by derivatizing human insulin or a human insulin analog with a saturated, straight-chain fatty acid having from 4 to 16 carbon atoms such that the fatty acid forms an amide bond with the ε-amino group of the B29-lysine of human insulin or a human insulin analog; and

b) a divalent metal cation.

2. The crystals of Claim 1, wherein the derivatized human insulin is selected from the group consisting of B29-butanoyl-human insulin, B29-pentanoyl-human insulin, and B29-hexanoyl-human insulin.

3. An insoluble composition, comprising the crystals of Claim 1.

4. The insoluble composition of claim 3, further comprising amorphous precipitate.

5. Ultralente-like crystals, comprising:

a) a protein selected from the group consisting of insulin and insulin analogs;

b) a derivatized human insulin or derivatized human insulin analog formed by derivatizing human insulin or a human insulin analog with a saturated, straight-chain fatty acid having from 4 to 16 carbon atoms such that the fatty acid forms an amide bond with the ε-amino group of the B29-lysine of human insulin or a human insulin analog; and

c) a divalent metal cation.

6. The crystals of Claim 5 , wherein the protein is human insulin.

7. The crystals of Claim 1, wherein the protein is a monomeric insulin analog.

9. The crystals of Claim 1, wherein the molar proportion of derivatized human insulin or derivatized human insulin analog is from 15% to 90% of the total protein.

10. The crystals of Claim 1, wherein the divalent metal cation is zinc, which is present at about 0.3 mole per mole of total protein to about 2 moles per mole of total protein.

11. An insoluble composition, comprising the crystals of Claim 5.

12. The insoluble composition of claim 11, further comprising amorphous precipitate.

13. A pharmaceutical composition, comprising an insoluble phase and a solution phase, wherein the insoluble phase comprises the insoluble composition of Claim 3 or 11, and wherein the soluble phase comprises an aqueous solvent.

14. The pharmaceutical composition of Claim 13 wherein the solution phase further comprises a preservative at a concentration of about 0.5 mg per mL to about 6 mg per mL of solution, a pharmaceutically acceptable buffer, and an isotonicity agent.

15. A method of treating diabetes comprising administering the crystals of Claim 1 or 5 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

16. A method of treating diabetes comprising administering the insoluble composition of Claim 3 or 11 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

17. A method of treating hyperglycemia comprising administering the crystals of Claim 1 or 5 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

18. A method of treating hyperglycemia comprising administering the insoluble composition of Claim 3 or 11 to a patient in need thereof in a quantity sufficient to regulate blood glucose levels in the patient.

19. A process for preparing the crystals of Claim 1, comprising:

a) preparing a crystallization solution comprising the derivatized human insulin or derivatized human insulin analog, a buffer, a salt, and a divalent cation; and

b) allowing time for crystallization to occur.

20. A process for preparing the crystals of Claim 5, comprising:

a) preparing a crystallization solution comprising (i) a protein, (ii) a derivatized human insulin or derivatized human insulin analog, (iii) a buffer, (iv) a salt, and (v) a divalent cation;

b) combining the crystallization solution of a) with a nucleating seed suspension; and

c) allowing time for crystallization to occur.

21. The crystals of Claim 1, wherein the fatty acid is myristoyl fatty acid.

22. The crystals of Claim 1, wherein the fatty acid is n-octanoic fatty acid.

23. The crystals of claim 1, wherein the human insulin analog is des(ThrB30)-human insulin.

24. The crystals of Claim 5, wherein the fatty acid is myristoyl fatty acid.

25. The crystals of claim 5, wherein the fatty acid is n-octanoic fatty acid.

26. The crystals of claim 5, wherein the human insulin analog is des(ThrB30)-human insulin.

27. The crystals of Claim 5, wherein the molar proportion of derivatized human insulin or derivatized human insulin analog is from 15% to 90% of the total protein.

28. The crystals of Claim 5, wherein the divalent metal cation is zinc, which is present at about 0.3 mole per mole of total protein to about 2 moles per mole of total protein.

Please type a plus sign (+) inside this box [+]

PTO/SB/01 (8-96) (MODIFIED)

Approved for use through 9/30/98. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION

[X] Declaration Submitted with Initial Filing

[ ] Declaration Submitted after Initial Filing

Attorney Docket Number	**X-12785**
First Named Inventor	**Mark Laurence Brader**
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Group Art Unit	
Examiner Name	

As a below named Inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole Inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the Invention entitled:

PROTAMINE-FREE INSOLUBLE ACYLATED INSULIN COMPOSITIONS

the specification of which
[ ] is attached hereto
OR
[X] was filed on (MM/DD/YYYY) 06/15/2000 as United States Application Number or PCT International Application Number PCT/US00/15037 and was amended on (MM/DD/YYYY) _____ (if applicable).

II hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or Inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached YES	Certified Copy Attached NO
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]

[ ] Additional foreign application numbers are listed on a supplemental priority sheet attached hereto:

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional applications(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)
60/141,435	06/29/1999

[ ] Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.

Please type a plus sign (+) inside this box [+]

PTO/SB/01 (8-96) (MODIFIED)

Approved for use through 9/30/98. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

DECLARATION

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number *(if applicable)*

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority sheet attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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Arleen Palmberg	40,422
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Edward Prein	37,212
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Michael J. Sayles	32,295
Robert L. Sharp	45,609
David M. Stemerick	40,187
Mark J. Stewart	43,936
Robert D. Titus	40,206
Robert C. Tucker	45,165
Tina M. Tucker	47,145
MaCharri Vorndran-Jones	36,711
Gilbert T. Voy	43,972
Thomas D. Webster	39,872
Lawrence T. Welch	29,487
Alexander Wilson	45,782
Dan L. Wood	48,613

☐ Additional registered practitioner(s) named on a supplemental sheet attached hereto.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ **A Petition has been filed for this unsigned inventor**

Given Name	Mark	**Middle Name**	Laurence	**Family Name**	Brader	**Suffix e.g. Jr.**	
Inventor's Signature	Mark Laurence Brader					**Date**	11-5-01
Residence: City	Indianapolis	**State**	IN	**Country**	US	**Citizenship**	NZ
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☐ **Additional Inventors are being named on supplement sheet(s) attached hereto.**